

REMARKS

Rejection under 35 U.S.C. § 102(b) over the Rockrath Reference

Claims 1-17 and 24-35 were rejected as anticipated by the Rockrath et al. patent, U.S. Patent 5,716,678. Applicants respectfully traverse the rejection and request reconsideration.

"An anticipating reference must describe the patented subject matter with sufficient clarity and detail to establish that the subject matter existed in the prior art and that such existence would be recognized by persons of ordinary skill in the field of the invention." *Crown Operations International Ltd. v. Solutia Inc.*, 62 USPQ2d 1917, 1921 (Fed. Cir. 2002). The Rockrath patent fails to anticipate claims 1-17 and 24-35 for at least five separate reasons: The Rockrath patent does not disclose a basecoat of any particular composition; the Rockrath patent does not disclose a refinish basecoat; the Rockrath patent does not disclose a refinish basecoat containing an acrylic polymer; the Rockrath patent does not disclose a refinish basecoat containing an acrylic polymer having a number average molecular weight of at least about 6000; and the Rockrath patent does not disclose a refinish basecoat containing an acrylic polymer polymerized using at least about 45% by weight of a cycloaliphatic monomer, based on the total weight of monomers polymerized.

MW
1500-
-10000

First, the present invention is directed to a "refinish basecoat composition." The Rockrath reference does not describe any specific basecoat compositions. The extent of the Rockrath reference's discussion of basecoat compositions is confined to The paragraph at the bottom of column 2, citing publications disclosing suitable

basecoats, and the mention in column 9, lines 43-44, of a "commercial, nonaqueous basecoat which contains aluminum pigment" over which the example transparent topcoats are applied. The present specification plainly distinguishes basecoat compositions from clearcoat compositions. See, e.g. paragraph 0002. The Rockrath patent (and hundreds of other patent documents) likewise distinguish basecoat compositions from the clearcoat compositions. See, e.g., column 1, lines 23-26 ("The above-described process for the production of a two-coat finish of the basecoat/clearcoat type is known and is employed in particular for the production of two-coat finishes") Basecoats compositions are today the predominant paints used to apply the color coat to vehicles. See D.A. Ansdell, Chapter 10: Automotive Paints of Paint and Surface Coatings, pages 440-441 (R. Lambourne and T.A. Strivens eds. 1999). All of these sources, including the Rockrath reference itself, distinguish basecoat compositions from the transparent clearcoat compositions applied over the basecoat compositions.

The Office Action states that the Rockrath patent discloses a clear coating composition, which it does, but the disclosure of a clear coating composition is not relevant to the patentability of the claimed basecoat composition. Besides the fact that the art clearly distinguishes basecoat compositions and clearcoat compositions, there is the irreconcilable distinction that basecoat composition do not produce transparent coating layers. The Rockrath patent thus does not anticipate the present claims because the Rockrath patent fails to disclose a basecoat composition.

The Rockrath patent does not anticipate the present claims for the additional reason that the Rockrath patent does not disclose a refinish basecoat composition or, apparently, any refinish composition. Applicants discuss the attributes of refinish coating compositions at length. See, e.g., paragraphs 0003-0005. Automotive refinish coating compositions are recognized as a distinct coatings technology. See, e.g., Coatings, Encyclopedia of Polymer Science and Engineering, Supplemental volume, pages 118-19 (H.F. Mark ed. 1989). One key attribute and requirement of a refinish coating is the ability to cure at room temperature or a very low temperature of up to about 150°F (65°C.). See paragraph 5. In contrast to a refinish coating composition, the compositions of the Rockrath patent are production line (also called OEM) coatings cured at 130-140°C. Col. 7, lines 24-29; col. 9, lines 46-49. The Rockrath patent nowhere describes or suggests a refinish coating composition, nor does the Examiner contend that it does. Because it does not describe a refinish coating composition, however, it cannot anticipate the present claims.

Thirdly, the Rockrath patent does not disclose a refinish basecoat containing an acrylic polymer. As already discussed, the Rockrath patent's disclosures concerning basecoat compositions are very limited. At most, the Rockrath patent discloses that basecoat compositions can contain water or organic solvents (col. 1, lines 60-61) and aluminum pigment (col. 9, lines 43-44). No basecoat composition binders are mentioned, let alone acrylic polymers. Because the Rockrath patent does not describe a refinish basecoat containing an acrylic polymer, it cannot anticipate the present claims.

Fourthly and fifthly, the Rockrath patent does not disclose a refinish basecoat containing an acrylic polymer having a number average molecular weight of at least about 6000 or an acrylic polymer polymerized with at least about 45% by weight of a cycloaliphatic monomer, based on the total weight of monomers polymerized. While the patent mentions number average molecular weights of "from 1500 to 10,000, preferably from 2500 to 5000" and describes polymerizing 28-85% by weight of a methacrylate ester selected from the group of aliphatic and cycloaliphatic methacrylates, it lacks the teaching of an acrylic having a number average molecular weight of at least about 6000 and "at least about 45% by weight of a cycloaliphatic monomer" that is necessary to anticipate the present invention. To anticipate an invention, a reference "must sufficiently describe the claimed invention to have placed the public in possession of it." *Minnesota Mining and Manufacturing Co. v. Johnson & Johnson Orthopaedics Inc.*, 24 U.S.P.Q.2d 1321 (Fed. Cir. 1992) [hereinafter *3M*]. In *3M*, for example, a claim to an orthopedic casting fabric having particular thickness and mesh size parameters was not anticipated by disclosure in a prior reference of an orthopedic casting fabric that was a knit fiberglass. *Id.* at 1332. Even though the claimed parameters were "subsumed in [the prior reference's] generalized disclosure of knit fiberglass as a substrate," the prior reference "provide[d] no guidance as to how to construct a fiberglass cast with the beneficial properties achieved by the [claimed] invention." *Id.* While the prior reference's fiberglass *could* have the claimed thickness and mesh size parameters, from which the beneficial properties would

necessarily flow, the prior reference was not "exact enough to identify" what the parameters were that would produce such beneficial properties. *Id.*

Similarly, the Federal Circuit held in *Ultradent Products Inc. v. Life-Like Cosmetics, Inc.*, 44 U.S.P.Q.2d 1336 (Fed. Cir. 1997) that a prior reference's disclosure of materials that might, with serendipity, be selected to fall within the claimed invention did not amount to an anticipating disclosure. The claim involved a material for bleaching teeth that had a matrix material having "sufficiently high viscosity" and being "sufficiently sticky" to have certain properties. *Id.* at 1341. The defendant asserted that the claims were invalid as anticipated by a prior reference because increasing the percent of a material, carboxypolymethylene, in one of the patent examples produced the required properties. *Id.* The court ruled that even if the adjusted example provided the claimed viscosity and stickiness, "that does not mean that the claimed matrix material is necessarily described by the [prior] patent. . . . [T]here are many possible compositions that could be made within the range of carboxypolymethylene concentration (0.05% to 5%) that the [prior] patent discloses." *Id.* at 3141-42. To be anticipating, the prior patent must "describe to one of skill in the art the tested combinations, or other combinations meeting the limitations of the claims, from among the many possible candidates." *Id.* at 1342.

It is irrelevant to the issue of anticipation that if one may unwittingly select from the Rockrath patent an acrylic polymer molecular weight, a cycloaliphatic monomer, and minimum amount of the cycloaliphatic monomer of Applicants' invention. The general disclosures of the Rockrath reference do not enable one to practice the invention and obtain the advantages of the invention. "Before a reference can be

found to disclose a feature by virtue of its inherency, one of ordinary skill in the art viewing the reference must understand that the unmentioned feature at issue is necessarily present in the reference.” *SGS-Thomson Microelectronics, Inc. v. International Rectifier Corp.*, 32 U.S.P.Q.2d 1496, 1503 (Fed. Cir. 1994) (citing *Continental Can Co. USA Inc. v. Monsanto Co.* 20 U.S.P.Q.2d 1746, 1749 (Fed. Cir. 1991)). To be “necessarily present” the feature must *always* be present in what the prior reference describes. *W.L. Gore & Associates v. Garlock, Inc.*, 220 U.S.P.Q. 303, 314 (Fed. Cir. 1983) (no anticipation where the claimed product had a “unique nature” and the processes of the prior references would not always inherently “produce products meeting all of the claim limitations”). The skilled artisan, armed with all that the Rockrath patent discloses, would have no direction for obtaining the benefits of Applicants’ invention.

Thus, an anticipating reference must lead one of ordinary skill in the art to select those embodiments that provide the particular advantage of the claimed invention when that advantage is not always available in the prior reference’s compositions. In the present case, the Rockrath patent provides no guidance to the skilled artisan who wishes to reduce the dry-to-handle time of a refinish basecoat composition and metal control because the Rockrath patent does not suggest any kind of *difference in results* between the compositions that contain aliphatic methacrylates and those that contain cycloaliphatic methacrylates, between the compositions that contain at least about 45% by weight of cycloaliphatic monomer and those that do not, and between compositions containing an acrylic polymer having a number average molecular weight of at least 6000 and those containing an

acrylic polymer with a lower number average molecular weight, for example in the preferred range of 2500 to 5000.

Furthermore, there is no specific example disclosed in the Rockrath patent that falls within the present claims. The only example with a cycloaliphatic monomer, "Polyacrylate resin solution (2)" in column 8, contains 23.9% by weight cycloaliphatic monomer. (Its number average molecular weight is not provided.)

Because the Rockrath reference does not teach or disclose at least five important aspects of the claimed invention, and does not fairly suggest any of these aspects, the present invention is patentable over the Rockrath reference. Applicants, therefore, respectfully request withdrawal of the rejection and reconsideration of the claims.

A number of the dependent claims rejected over the Rockrath patent contain additional elements not disclosed or suggested by the Rockrath patent, as follows.

Claim 5 is patentable over the Rockrath patent for the additional reason that the Rockrath patent does not teach, disclose, or suggest a composition which is free of materials reactive with the acrylic polymer. On the contrary the Rockrath patent only teaches compositions containing a crosslinking agent "which is suitable for the crosslinking of hydroxyl group-containing polyacrylate resins." Col. 5, lines 15-19.

Claim 6 is patentable over the Rockrath patent for the further reason that the Rockrath patent does to disclose compositions containing a polyester in addition to the acrylic polymer.

Claim 8 is patentable over the Rockrath patent for the further reason that the Rockrath patent provides no disclosure of compositions containing acrylic polymers having a weight average molecular weight of at least about 17,000. The Rockrath disclosure of number average molecular weights of 1500 to 10,000 makes no suggestion of an appropriate weight average molecular weight. While the weight average molecular weight must be at least equal to the number average molecular weight, it may be essentially any value above the number average molecular weight.

Claim 13 is patentable over the Rockrath reference for the additional reason that the Rockrath patent does not disclose or suggest a composition containing an acrylic polymer polymerized with about 1-20 % by weight of a combination of styrene, n-butyl methacrylate, and n-butyl acrylate and about 0.25-20 % by weight of a monomer having amine functionality.

Claims 24-32 are patentable over the Rockrath reference for the additional reason that, because the Rockrath patent does not disclose the basecoat composition, it follows that the Rockrath patent does not disclose applying the defined refinish basecoat composition, allowing it to dry for up to about twenty minutes, and applying over it a clearcoat composition. Regarding claims 26 and 27, the Rockrath

patent also does not disclose such a method in which the clearcoat contains a material reactive with an acrylic polymer of the basecoat layer. Regarding claims 28 and 30-32, the Rockrath patent does not speak of dry to handle times at all (since it concerns OEM coatings rather than refinish coatings), let alone short dry to handle times such as five minutes after application or including enough of the acrylic to achieve a desired dry to handle time.

Claim 35 is patentable over the Rockrath patent for the additional reason that the Rockrath patent does not teach, disclose, or mention UV-curable components.

For all of these reasons, Applicants respectfully assert that the claims are patentable over the Rockrath patent. Accordingly, Applicants request withdrawal of the rejection and reconsideration of the claims.

Rejection under 35 U.S.C. § 103(a) over the Rink Reference in View of the Jouck Reference

Claims 1-35 were rejected as unpatentable over the Rink et al. reference, U.S. Patent 5,759,631 in view of the Jouck et al. reference, U.S. Patent 5,322,715. Applicants respectfully traverse the rejection and request reconsideration.

The acrylic polymer of all of the claims has a number average molecular weight of at least about 6000, while the Rink reference is explicitly limited to acrylic polymers having number average molecular weights below 5000. See, e.g., column 3, line 18.

The Office Action suggests that a weight average molecular weight of 20,000 is inherently disclosed. Applicants disagree, but in any event weight average molecular weight and number average molecular weight are different things. The explicit disclosure of the Rink reference teaches away from the claimed number average molecular weight.

Further, the Rink reference fails to teach, disclose, or suggest the basecoat composition of the claims containing such an acrylic polymer. The disclosures of the Rink reference relating to basecoat compositions are found in column 8, lines 43-61, which recites a number of references and describes in part a basecoat containing a polyester. The Rink reference teaches very little about basecoat compositions. As already discussed in connection with the Rockrath patent, basecoat compositions and clearcoat compositions are recognized as distinct in the art, serving different coating criteria.

Further, the combination of the Rink and Jouck references is improper. A prima facie case of obviousness cannot be supported if a modification of the teachings necessary to support the rejection destroys the intent, purpose, or function of the reference. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). The Rink reference teaches an organic solventborne, transparent topcoat composition to be applied over a basecoat layer, in which the transparent topcoat composition contains an acrylic with a number average molecular weight of 1000 to 5000. Rink, col. 3, line 18; col. 7, lines 52-65; col. 8, lines 30-42. In contrast, the Jouck reference describes an aqueous basecoat composition containing an acrylic with a number average molecular weight of 200,000 to 2,000,000. Jouck, col. 2, lines 40-41 & line 67 to col.

3, line 1. These teachings cannot be combined or reconciled in any way, so their combination in rejection is improper.

It is particularly improper to suggest that the Rink transparent topcoat should be modified by adding an opaque pigment such as titanium dioxide, iron oxide, carbon black, metal pigments, etc. If such pigments were added the coating composition would, of course, no longer be transparent and would no longer serve its purpose as a transparent topcoat to be applied over a basecoat layer. Beyond that, basecoat layers and clearcoat layers are distinct in the art and have distinct requirements.

Even if the Rink and Jouck references were combinable, the Jouck reference basecoat composition does not in anyway suggest the particular composition of the present claims. Instead, the Jouck reference is directed to controlling the glass transition temperatures of a two-stage emulsion polymer for a basecoat composition.

Moreover, neither reference suggests selecting at least about 45% by weight of a cycloaliphatic monomer from the many acrylic compositions they teach, nor does either recognize the unique benefits of doing so. The law is clear that a subgroup possessing a different feature or property may be patentable over a reference disclosing a broad genus that includes the subgroup to which the claims are directed when the reference does not disclose or suggest the selection of the claimed subgroup. *In re Deuel*, 34 U.S.P.Q.2d 1210 (Fed. Cir. 1995) (“a broad genus does not necessarily render obvious each compound within its scope”); *In re Baird*, 29 U.S.P.Q.2d 1550 (Fed. Cir. 1994) (claim to toner comprising binder resin that is bisphenol A polyester with “optimal characteristics for flash fusing” patentable over

genus of diphenol polyesters disclosed in prior reference) *In re Bell*, 26 U.S.P.Q.2d 1529 (Fed. Cir. 1993) (claim to DNA and RNA molecules with certain human genes patentable over disclosure of amino acid sequences); *In re Jones*, 21 U.S.P.Q.2d 1941 (Fed. Cir. 1992) (particular dicamba salt patentable over disclosure of genus of dicamba salts). Such is the present case. The cited references, which generally teach polymerization using a much broader selection of monomers and/or amounts, do not suggest that if at least about 45% by weight of a cycloaliphatic monomer is included in the acrylic polymer that the surprisingly improved dry times and appearance can be achieved.

Further, with respect to claim 5, neither reference teaches or suggests a refinish basecoat composition containing an acrylic polymer and being free of materials reactive with the acrylic polymer.

With respect to claim 6, neither reference mentions or suggests a refinish basecoat composition containing the acrylic polymer and a polyester.

Further, regarding claim 13, neither reference teaches copolymerizing with at least one acrylic or methacrylic ester having amine functionality. The Office Action refers to hindered amine light stabilizer additives included in the Rink coating composition, but of course those are not monomers incorporated into the acrylic polymer. Therefore, the references fail to disclose or suggest the subject matter of claim 13.

Finally, neither reference describes, discusses, or suggests refinish basecoat intermix systems as claimed in claims 18-23 or compositions containing UV curable components as in claim 35.

In view of the deficiencies of these references, Applications submit that the present claims are patentable. Reconsideration of the claims is, therefore, respectfully requested.

Rejection under 35 U.S.C. § 103(a) over the Rockrath Reference in View of the Yamamoto Reference

Claims 18-23 were rejected as unpatentable over the Rockrath reference in view of the Yamamoto reference, U.S. Patent 5,244,979. Applicants respectfully traverse the rejection and request reconsideration.

Claims 18-23 concern a refinish basecoat intermix system for preparing a refinish basecoat composition as in claim 1. Just as the refinish basecoat composition is patentable over the Rockrath patent, the intermix system for preparing such a refinish basecoat composition is patentable over the Rockrath patent.

As already discussed, the Rockrath reference does not describe or discuss basecoat compositions of any kind, and specifically does not describe or discuss refinish basecoat compositions. Even more importantly with regard to these claims, the Rockrath patent does not in any way describe or discuss preparation of basecoat composition, particularly refinish basecoat composition, let alone a particular intermix system for preparing refinish basecoat compositions.

Applicants point out that the refinish basecoat intermix system is formulated so that the refinish basecoat composition of the invention may be prepared in any desired color from its components. See, e.g. paragraph 31 of the specification. The Rockrath patent does not mention or suggest an intermix system.

The amine-functional dispersing acrylic of claim 23 is the hydroxyl-functional acrylic polymer of claim 18 that has a number average molecular weight of at least about 6000 and is polymerized using at least about 45% by weight of a cycloaliphatic monomer. The Yamamoto reference does not appear to describe or suggest color components for a mixer system containing such a polymer. Instead, the Yamamoto reference appears to describe preparing pigment dispersants having pendant polyester or polyester polyether segments. See col. 3, Figs. I and II and lines 66-67.

The claims are thus patentable over the combination of the Rockrath and Yamamoto patents. In view of the deficiencies of these references, Applicants request reconsideration and allowance of the claims.

Rejection under 35 U.S.C. § 103(a) over the Rockrath Reference in View of the Jouck Reference

Claims 18-23 were rejected as unpatentable over the Rockrath reference in view of the Jouck reference, U.S. Patent 5,322,715. Applicants respectfully traverse the rejection and request reconsideration.

The Rockrath reference is deficient for the reasons discussed in regard to the rejection of claims 1-17 and 24-35 and in regard to the rejection of claims 18-23 above. The Jouck reference does not remedy the deficiencies of the primary reference. As was true above with regard to the combination with the Rink patent, the combination of the Rockrath and Jouck references is improper. A prima facie case of obviousness cannot be supported if a modification of the teachings necessary to support the rejection destroys the intent, purpose, or function of the reference. *In re*

Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). The Rockrath patent, just like the Rink patent, teaches a transparent topcoat with a low (1500-10,000) number average molecular weight, while the Jouck reference describes an aqueous basecoat composition containing an acrylic with a number average molecular weight of 200,000 to 2,000,000. Jouck, col. 2, lines 40-41 & line 67 to col. 3, line 1. These teachings cannot be combined or reconciled in any way, so their combination in rejection is improper.

Further, the Jouck reference is directed to controlling the glass transition temperatures of a two-stage emulsion polymer for a basecoat composition. There is no teaching or suggestion of reducing dry times by using a certain amount of cycloaliphatic monomer in the acrylic composition.

Finally, neither reference teaches or suggests the inventive refinish basecoat intermix system of claims 18-23. Because the references do not suggest the basecoat compositions of the invention, it follows that the references cannot suggest an intermix system designed to produce such basecoat compositions.

In view of the deficiencies of these references, Applications submit that the present claims are patentable. Reconsideration of the claims is, therefore, respectfully requested.

Rejections for Obviousness-Type Double Patenting

Claims 1-17 and 24-35 have been rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-23 of copending Application No.

09/850,837 and claims 1-21 of copending Application No. 09/965,423. Applicants respectfully traverse this rejection and request reconsideration.

The Office Action states that the present claims are not patentably distinct because "they both claim clear coating composition." That is not correct, however, because the present claims are directed to basecoat coating compositions, which are NOT clear and not clearcoat compositions. Accordingly, Applicants submit that a prima facie case of obviousness has not been made out and request that the rejections be withdrawn.

Conclusion

Applicants believe that the claims are in condition for allowance, and an early allowance of the application is earnestly requested.

The Examiner is invited to telephone if it would be helpful to resolving any matter.

Respectfully submitted,



Anna M. Budde
Registration No. 35,085

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Harness, Dickey & Pierce, P.L.C.
P.O. Box 828
Bloomfield Hills, Michigan 48303
(248) 641-1600